Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in this application:

Listing of Claims:

1. (Currently Amended) A method for depositing fluid droplets on a surface, the method comprising: ~~the steps of~~

~~a.~~ establishing a ~~substantially collinear~~ flow of air substantially collinear with a trajectory of fluid droplets emitted by each of one or more droplet emitters, the ~~substantially collinear~~ flow of air having a velocity profile characterized by a maximum airflow velocity; and

~~b.~~ emitting at least one fluid droplet into a first region of the ~~collinear~~ flow of air, ~~said~~ the first region having a first regional airflow velocity lower than the maximum airflow velocity ~~of air within the collinear flow of air~~.

2. (Currently Amended) A method according to claim 1, comprising ~~the additional step of ensuring that the~~ substantially matching a velocity at which the at least one ~~inkjet~~ fluid droplet is emitted into the first region ~~of the collinear flow of air and~~ with the first regional airflow velocity ~~of the region of the collinear flow of air are substantially matched~~.

3. (Currently Amended) A method for depositing fluid droplets on a surface, the method comprising: ~~the steps of~~

~~a.~~ establishing a substantially collinear flow of air; and

~~b.~~ emitting the fluid droplets from a plurality of nozzles into a region of ~~said collinear~~ the flow of air, the region having a regional airflow velocity lower than ~~the~~ a maximum airflow velocity ~~of air within~~ of the ~~collinear~~ flow of air.

4. (Cancelled)

5. (Currently Amended) A method for depositing fluid droplets on a surface, the method comprising: ~~the steps of~~

~~a.~~ establishing a substantially collinear flow of air; and

~~b.~~ emitting the fluid droplets from a plurality of groups of nozzles into a plurality of regions of the ~~collinear~~ flow of air, the plurality of regions each having a regional airflow velocity lower than ~~the~~ a maximum airflow velocity ~~of air within~~ of the ~~collinear~~ flow of air ~~, every member of~~ and the plurality of regions ~~of the collinear flow of air~~ each having a different regional airflow velocity.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended) An apparatus for depositing fluid droplets on a surface, the apparatus comprising:

~~a.~~ ~~a collinear~~ an airflow duct;

means for establishing in the airflow duct a collinear airflow, the collinear airflow ~~duct adapted to provide~~ comprising:

(a) an airflow velocity profile ~~within the collinear airflow, the airflow velocity profile having i.~~ with a maximum airflow velocity; and

~~ii.~~ (b) a first region ~~having~~ wherein the collinear airflow has a first regional airflow velocity, ~~the regional airflow velocity being~~ which is lower than the maximum airflow velocity; and

~~b.~~ ~~inkjet nozzles~~ at least one nozzle disposed to emit fluid droplets at a fluid droplet velocity into the first region ~~of regional airflow velocity at an inkjet fluid droplet velocity~~.

10. (Currently Amended) The apparatus of claim 9, ~~further~~ comprising a systems controller ~~, the systems controller capable of ensuring that the inkjet~~ configured to at least substantially match the fluid droplet velocity and the first regional airflow velocity ~~are substantially matched~~.

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (New) A method according to claim 1 wherein emitting at least one fluid droplet into the first region comprises emitting fluid droplets from a plurality of nozzles into the first region.

16. (New) A method according to claim 1 wherein emitting at least one fluid droplet into the first region comprises emitting the at least one fluid droplet from a first nozzle into the first region and wherein the method comprises emitting at least one additional fluid droplet from a second nozzle into a second region of the flow of air, the second region having a second regional airflow velocity lower than the maximum airflow velocity.

17. (New) A method according to claim 16 wherein the first and second regional airflow velocities are equal to one another.

18. (New) A method according to claim 17 wherein the first and second regions are on opposed sides of a third region of the flow of air and wherein the flow of air has the maximum airflow velocity in the third region.

19. (New) A method according to claim 18 wherein the first and second regions are symmetrically disposed with respect to the third region.

20. (New) A method according to claim 16 wherein the first and second regional airflow velocities are different from one another.

21. (New) A method according to claim 16 comprising substantially matching a velocity at which the at least one fluid droplet is emitted into the first region with the first regional airflow velocity.

22. (New) A method according to claim 21 comprising substantially matching a velocity at which the at least one additional fluid droplet is emitted into the second region with the second regional airflow velocity.

23. (New) A method according to claim 1 wherein emitting at least one fluid droplet into the first region comprises emitting the at least one fluid droplet from at least one first row of a plurality of rows of nozzles into the first region and wherein the method comprises emitting at least one additional fluid droplet from at least one second row of the plurality of rows of nozzles into a second region of the flow of air, the second region having a second regional airflow velocity lower than the maximum airflow velocity.

24. (New) A method according to claim 23 comprising substantially matching a velocity at which the at least one fluid droplet is emitted into the first region with the first regional airflow velocity.

25. (New) A method according to claim 24 comprising substantially matching a velocity at which the at least one additional fluid droplet is emitted into the second region with the second regional airflow velocity.

26. (New) A method according to claim 1 wherein establishing a flow of air substantially collinear with a trajectory of fluid droplets emitted by each of one or more droplet emitters comprises forcing air past at least one surface and wherein the first region is between the at least one surface and a location of the maximum airflow velocity.

27. (New) A method according to claim 26 wherein the at least one surface is a planar surface.

28. (New) A method according to claim 26 wherein the at least one surface is an interior surface of a duct.

29. (New) A method according to claim 28 wherein the duct is round in cross-section.

30. (New) A method according to claim 28 wherein the duct is rectangular in cross-section.

31. (New) A method according to claim 1 wherein establishing a flow of air substantially collinear with a trajectory of fluid droplets emitted by each of one or more droplet emitters comprises forcing air between a pair of opposed surfaces.

32. (New) A method according to claim 31 wherein the opposed surfaces converge as they extend in a direction of the flow of air.

33. (New) A method according to claim 31 wherein the opposed surfaces diverge as they extend in a direction of the flow of air.

34. (New) A method according to claim 28 wherein the duct comprises opposing walls that converge as they extend in a direction of the flow of air.

35. (New) A method according to claim 28 wherein the duct comprises opposing walls that diverge as they extend in a direction of the flow of air.

36. (New) A method according to claim 16 wherein the flow of air has a first velocity gradient in the first region.

37. (New) A method according to claim 36 wherein the flow of air has a second velocity gradient in the second region.

38. (New) A method according to claim 1 wherein the flow of air is a laminar flow of air.

39. (New) A method according to claim 1 wherein the flow of air comprises a laminar velocity profile.

40. (New) Apparatus according to claim 9 wherein the collinear airflow comprises a plurality of regions, each region having a regional airflow velocity lower than the maximum airflow velocity, and wherein the apparatus comprises a plurality of groups of nozzles, each group of nozzles comprising one or more nozzles disposed to emit fluid droplets into a corresponding one of the plurality of regions at a corresponding fluid droplet velocity.

41. (New) Apparatus according to claim 40, comprising one or more systems controllers, the one or more systems controllers configured to match the fluid droplet velocity of the fluid droplets emitted by each of the groups of nozzles with the regional airflow velocity of the corresponding one of the plurality of regions.

42. (New) Apparatus according to claim 41 wherein the plurality of regions comprises at least the first region and a second region having a second regional airflow velocity and wherein the first and second regional airflow velocities are substantially equal to one another.

43. (New) Apparatus according to claim 41 wherein the plurality of regions comprises at least the first region and a second region having a second regional airflow velocity and wherein the first and second regional airflow velocities are different from one another.

44. (New) Apparatus according to claim 40 wherein the groups of nozzles are disposed symmetrically with respect to the velocity profile.

45. (New) Apparatus according to claim 40 wherein the fluid droplet velocity of the fluid droplets emitted by at least two of the groups of nozzles is substantially equal.

46. (New) Apparatus according to claim 40 wherein the fluid droplet velocity of the fluid droplets emitted by at least two of the groups of nozzles is different.

47. (New) Apparatus according to claim 9 wherein the collinear airflow comprises a plurality of regions, each region having a regional airflow velocity lower than the maximum airflow velocity, and wherein the apparatus comprises a plurality of rows of nozzles, each row of nozzles arranged to emit fluid droplets into a corresponding one of the plurality of regions at a corresponding fluid droplet velocity.

48. (New) Apparatus according to claim 47 comprising one or more systems controllers, the one or more systems controllers configured to match the fluid droplet velocity of the fluid droplets emitted by each of the rows of nozzles with the regional airflow velocity of the corresponding one of the plurality of regions.

49. (New) Apparatus according to claim 48 wherein the fluid droplet velocity of the fluid droplets emitted by at least two of the rows of nozzles is substantially equal.

50. (New) Apparatus according to claim 48 wherein the fluid droplet velocity of the fluid droplets emitted by at least two of the rows of nozzles is different.

51. (New) Apparatus according to claim 47 wherein the plurality of regions comprises at least the first region and a second region having a second regional airflow velocity and wherein the first and second regional airflow velocities are substantially equal to one another.

52. (New) Apparatus according to claim 47 wherein the plurality of regions comprises at least the first region and a second region having a second regional airflow velocity and wherein the first and second regional airflow velocities are different from one another.

53. (New) Apparatus according to claim 47 wherein the plurality of regions includes at least two regions having substantially equal regional airflow velocities.

54. (New) Apparatus according to claim 47 wherein the plurality of regions includes at least two regions having different regional airflow velocities.

55. (New) Apparatus according to claim 47 wherein the plurality of rows of nozzles are disposed symmetrically with respect to a location of the maximum airflow velocity in the velocity profile.

56. (New) Apparatus according to claim 9 wherein the airflow duct comprises a round cross section.

57. (New) Apparatus according to claim 9 wherein the airflow duct comprises a rectangular cross-section.

58. (New) Apparatus according to claim 9 wherein the airflow duct comprises a pair of opposed surfaces.

59. (New) Apparatus according to claim 58 wherein the opposed surfaces converge as they extend in a direction of the airflow.

60. (New) Apparatus according to claim 58 wherein the opposed surfaces diverge as they extend in a direction of the airflow.

61. (New) Apparatus according to claim 9 wherein the velocity profile comprises a laminar airflow velocity profile.